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J. Douglas  
10/12/00  
719

Applicant: Cooper, J. Carl  
Serial No: 09/545,529.  
File Date: April 7, 2000  
Invention: Audio to Video Timing Measurement  
for MPEG Type Television Systems

Examiner:  
Art Unit:  
Docket:

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OCT -4 2000  
TC 2700 MAIL ROOM  
JCC400A

May 4, 2000  
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ASSISTANT COMMISSIONER OF PATENTS  
Washington, D.C. 20231

Information Disclosure Statement Submission

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SEP 29 2000  
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Dear Sir:

Applicant submits herewith an Information Disclosure Statement listing 9 U.S. Patents and one technology introduction paper. The relevance of the U.S. Patents were discussed in the specification of the application as filed. In particular it is noted that 5,847,769 shares a common parent with the present application, and further that this patent was withdrawn from issue, but was nevertheless published.

The Tektronix Technology Introduction paper was made available to attendees of the National Association of Broadcaster's convention (NAB) which opened Monday April 10, 2000 in Las Vegas and ran through Thursday April 13. In addition, a prototype

system which purported to embody the technology of the paper was demonstrated.

Applicant first received a copy at that convention. Questions made to the engineer who was demonstrating the system, Mr. Tucker, as to how the system operated were answered with the same level of detail as that presented in the sheet. Applicant notes that the date of the NAB convention opening is three days after the filing date of the instant application, and as such this paper is not believed to be prior art. Nevertheless, applicant wishes to bring this paper to the attention of the examiner as it clearly demonstrates a long felt need for applicant's invention.

In the event it should be demonstrated at a later date that this paper was available as prior art before the filing of applicant's disclosure, applicant wishes to direct the examiner's attention to the description of the Tektronix system given in the paper. In particular in such event the Technology Introduction sheet would be particularly pertinent to applicant's invention (if such were prior art) in that it discloses in a broad sense the use of digital watermarking technology for use in correcting audio to video delay errors. It is noted that Tektronix states "[t]he solution (see Figure 1) involves using digital watermarking technology to record the desired audio-to-video timing relationship by encoding the program video signal with an audio reference code derived from the audio program's natural envelope 'signature'." The Tektronix paper however offers little detail on how this is done, and in particular offers little explanation of precisely what the audio

reference code is or how the audio reference code is derived or what the "audio program's natural envelope 'signature'" is. Several questions also arise as to how the the audio reference code is utilized so that the timing error can be continually measured and used.

Applicant respectfully requests that the instant application be passed to examination and allowance.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Carl Cooper", with a long horizontal flourish extending to the right.

J. Carl Cooper  
Reg. 34,568